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44

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ashley J. Birkett ) PATENT  
Serial No. 10/082,014 ) Attorney  
Filed: February 21, 2002 ) Docket No.  
For: IMMUNOGENIC HBc CHIMER ) ICC-130.00  
PARTICLES STABILIZED WITH AN ) (4564/85124)  
N-TERMINAL CYSTEINE )  
Examiner: Unknown ) Group Art  
 ) Unit: Unknown  
 )

PETITION TO CORRECT FILING DATE FROM  
EXPRESS MAIL FILING PURSUANT TO 37 CFR §1.10(c)

RECEIVED

Assistant Commissioner for Patents  
Washington, D.C. 20231

APR 29 2002

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Sir:

The subject application was filed by Express Mail on February 21, 2002 and received a filing date of February 22, 2002, as is shown by the Filing Receipt received on April 2, 2002, a copy of which is enclosed as Exhibit I. It is respectfully requested that the filing date be corrected to February 21, 2002, and that a Corrected Filing Receipt be issued. Check No. 073844 in the amount of \$130.00 for the required fee for this Petition is enclosed herewith.

More specifically, the subject application was filed with Express Mailing label EL854692730US, "Express Mail Post Office to Addressee", as shown in enclosed Exhibit II, a copy of the first page of the subject application, and Exhibit III, copy of the signed Certificate of Mailing by "Express Mail" this application, both true copies being from counsel's file.

04/24/2002 GTEFFERA 00000004 10082014

01 FC:122

130.00 OP

-1-

Adj. to grant date: 09/17/2002 GTEFFERA 00000004 10082014  
09/24/2002 GTEFFERA 00000004 10082014 -130.00 OP  
01 FC:122  
Ref: 09/17/2002 AKELLEY 0010074500  
Date/Number: 10082014  
Name/Number:  
FC: 704

Enclosed Exhibit III identifies James C. Cato as the person who actually filed the application by mailing it at a U.S. Post Office. Enclosed Exhibit IV is a declaration of that Fred C. Cato, who identifies himself as an employee of Archer Management Services, a company that contracts for mail room services at the undersigned counsel's law firm. Mr. Cato states that he was given the package bearing Express Mail label No. EL854692730US that contained the subject application and carried it to the U.S. Post Office Main Chicago Office located at Harrison and Canal Streets in Chicago.

He states that he arrived at that Post Office at about 7:15 PM, and noted a long line in the Express Mail lane. Mr. Cato states that he was informed by a U. S. postal employee that they were having computer problems dealing with the type of package he had, and that such packages had to be dealt with by hand. Mr. Cato gave the package to the postal worker at the head of the processing line at a time no later than 8:00 PM, but he was not given a filled out mailing label by the postal employee who was supposed to give it to him. As a consequence, no copy of the mailing label accompanies this Petition.

Also enclosed herewith as Exhibit V is a Declaration by Mr. James Eppolito, an employee of the U.S. Post Office Main Chicago Office, who works in the Express Mail Department. Mr. Eppolito's Declaration corroborates the computer difficulties and long processing line at that Post Office at the time on February 21, 2002 noted by Mr. Cato. Mr. Eppolito also states his understanding of the events by which U. S. postal employees instructed persons such as Mr. Cato to leave their packages and ensured them of processing that evening.

Mr. Eppolito further states that Mr. Cato left the Express Mail labeled package with label No. EL854692730US at the

Post Office on February 21, 2002 at a time between about 7:15 and 7:30 PM. Mr. Eppolito thus corroborates the possession and control of the application by the U.S. Postal service on February 21, 2002.

Thus, an employee of the U. S. Postal Service has acknowledged receipt of the package bearing the subject application on February 21, 2002, the date to which the filing date is requested to be changed. In view of governmental possession and control of the application is agreed by one branch of the U. S. government to have been exercised on February 21, 2002, it is submitted that the U.S. Patent and Trademark Office concur and correct the filing date. A marked-up copy of the Filing Receipt containing the desired change in date is enclosed.

No further fee or petition is believed to be necessary. However, should any further fee be needed, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

Respectfully submitted,

By   
Edward P. Gamson, Reg. No. 29,381

Enclosures  
Exhibits

- I Filing Receipt
- II Application page 1
- III Certificate of Express Mailing
- IV Declaration of James C. Cato
- V Declaration of James Eppolito

Petition Fee  
Response to Notice to File Missing Parts  
Missing Parts Fee  
Marked-up Filing Receipt

WELSH & KATZ, LTD.  
120 South Riverside Plaza, 22nd Floor  
Chicago, Illinois 60606  
Phone (312) 655-1500  
Fax No. (312) 655-1501

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CERTIFICATE OF MAILING

I hereby certify that this Petition, its enclosed Exhibits I-V, the Petition Fee, Response to Notice to File Missing Parts, Missing Parts Fee, and Marked-up Filing Receipt are being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on April 12, 2002.

  
Edward P. Gamson, Reg. No. 29,381

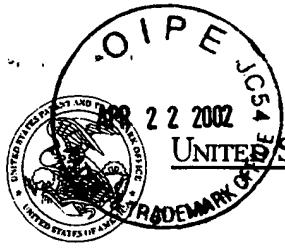


EXHIBIT I

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Page 1 of 2

## UNITED STATES PATENT AND TRADEMARK OFFICE

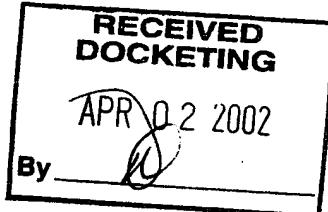
COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

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EPG

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/082,014	02/22/2002	1645	1111	85124	8	93	5

24628  
WELSH & KATZ, LTD  
120 S RIVERSIDE PLAZA  
22ND FLOOR  
CHICAGO, IL 60606



CONFIRMATION NO. 4213

## FILING RECEIPT



\*OC000000007743826\*

Date Mailed: 03/29/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Ashley J. Birkett, Escondido, CA;

## Domestic Priority data as claimed by applicant

THIS APPLICATION IS A CIP OF 09/930,915 08/15/2001

## Foreign Applications

If Required, Foreign Filing License Granted 03/27/2002

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

## Title

Immunogenic HBc chimer particles stabilized with an N-terminal cysteine

## Preliminary Class

435

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WELSH & KATZ, LTD

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**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related application(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



## DECLARATION OF JAMES C. CATO

I, James C. Cato, declare as follows:

1. I am an employee of Archer Management Services, a contract service for mailroom activities at the law firm of Welsh & Katz, Ltd.
2. On Thursday, February 21, 2002, as part of my job duties, I was given an Express Mail package, bearing Express Mail label number EL85 4692 730US to hand-deliver to the United States Post Office Main Chicago Office ("Post Office") on Harrison and Canal Streets. This Express Mail package was destined for the United States Patent and Trademark Office in Arlington, VA.
3. When I arrived at the Post Office, at approximately 7:15 p.m. on February 21, 2002, I noticed that there was a long line for processing metered mail such as the Express Mail package I was delivering. I was informed by a postal worker in the Post Office that the reason for the long line was that there were problems with the computers. Therefore, the metered mail such as the Express Mail package I was delivering had to be processed by hand.
4. I provided the Express Mail package, bearing the Express Mail label number EL85 4692 730US, to the postal worker at the Post Office who was at the head of the line for processing metered mail such as this Express Mail package, at a time no later than 8:00 p.m. on Thursday, February 21, 2002. I did not receive a receipt when I handed over the Express Mail package.

I, James C. Cato, declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on: 22 Feb. '02

James C. Cato  
James C. Cato

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APR 29 2002  
OFFICE OF PETITIONS

Express Mailing Label No. 4692730US  
IMS-130.0  
4564/85124

IMMUNOGENIC HBc CHIMER PARTICLES STABILIZED  
WITH AN N-TERMINAL CYSTEINE

CROSS-REFERENCE TO RELATED APPLICATION

This is a continuation-in-part of application Serial No. 09/930,915, filed August 15, 2001, whose disclosures are incorporated herein by reference.

TECHNICAL FIELD

The present invention relates to the intersection of the fields of immunology and protein engineering, and particularly to a chimeric hepatitis B virus (HBV) nucleocapsid protein that is engineered for both enhanced stability of self-assembled particles via an N-terminal cysteine residue and the display of an immunogenic epitope.

BACKGROUND OF THE INVENTION

The family hepadnaviridae are enveloped DNA-containing animal viruses that can cause hepatitis B in humans (HBV). The hepadnavirus family includes hepatitis B viruses of other mammals, e.g., woodchuck (WHV), and ground squirrel (GSHV), and avian viruses found in ducks (DHV) and herons (HeHV). Hepatitis B virus (HBV) used herein refers to a member of the family hepadnaviridae that infects mammals, as compared to a virus that infects an avian host, unless the discussion refers to a specific example of a non-mammalian virus.

The nucleocapsid or core of the mammalian hepatitis B virus (HBV or hepadnavirus) contains a sequence of 183 or 185 amino acid residues, depending

COPY OF PAPERS  
ORIGINALLY FILED**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Ashley J. Birkett

Docket No.

ICC-130.0 (85124)

Serial No.  
New ApplicationFiling Date  
February 21, 2002Examiner  
UnknownGroup Art Unit  
Unknown

Invention: IMMUNOGENIC HBc CHIMER PARTICLES STABILIZED WITH AN N-TERMINAL CYSTEINE

APR 22 2002

PATENTS &amp; TRADEMARK OFFICE

I hereby certify that this Appln and Fee Transmittal Forms, Patent Appn and its stated enclosures and fee  
*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under  
 37 CFR 1.10 in an envelope addressed to: The Commissioner of Patents and Trademarks, Washington, D.C.

20231-0001 on February 21, 2002  
*(Date)*

James Cato

(Typed or Printed Name of Person Mailing Correspondence)

(Signature of Person Mailing Correspondence)

EL854692730US

("Express Mail" Mailing Label Number)

Note: Each paper must have its own certificate of mailing.

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APR 29 2002

OFFICE OF PETITIONS



## DECLARATION OF JAMES EPPOLITO

I, James Eppolito, declare as follows:

1. I am an employee of the United States Post Office Main Chicago Office ("Post Office") on Harrison and Canal Streets, Chicago, IL and work in the Express Mail Department.
2. On Thursday, February 21, 2002, at approximately 7:15 p.m.– 7:30 p.m., I was aware that there was a very long line for processing Express Mail packages. It is my understanding that a clerk advised those with corporate accounts to leave their packages and ensured the individuals that the packages would be processed that evening.
3. This Declaration is to verify that the explanation in the Declaration of James C. Cato (attached) is correct. Mr. Cato did drop off an Express Mail package, bearing Express mail label number EL85 4692 730US, at the Post Office on Thursday, February 21, 2002, at approximately 7:15 p.m. – 7:30 p.m.

I, James Eppolito, declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on:

3-1-02

James Eppolito  
James Eppolito

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application:	Ashley Birkett	) <u>PATENT</u>
Serial No.:	10/082,014	) Attorney Docket
Filed:	February 22, 2002	) ICC-130.0
For:	IMMUNOGENIC HBc CHIMER PARTICLES STABILIZED WITH AN N-TERMINAL CYSTEINE	) (4564/85124)
Examiner:	Not yet assigned	) Group Art Unit: Not yet assigned

COMMUNICATION

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Commissioner for Patents  
Washington, D.C. 20231

APR 29 2002  
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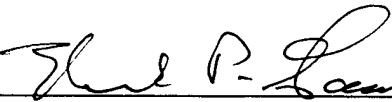
Sir:

In response to the Notice To File Missing Parts of Application - Filing Date Granted, mailed March 29, 2002, (copy attached), enclosed are the Declaration and Power of Attorney document executed by the applicants of the above-identified application.

Also enclosed is Check No. 073796 in the amount of \$65.00 to cover the surcharge set forth in 35 C.F.R. 1.16(e)) and a Request for Refund of Filing Fee.

Please charge any additional fees concerning this matter to our Deposit Account No. 23-0920. A duplicate copy of this paper is enclosed.

Respectfully submitted,

By   
Edward P. Gamson, Reg. No. 29,381

Enclosures

Exhibits

- I Filing Receipt
- II Application page 1
- III Certificate of Express Mailing
- IV Declaration of James C. Cato
- V Declaration of James Eppolito

Petition Fee

Response to Notice to File Missing Parts

Missing Parts Surcharge Fee

Notice to File Missing Parts - Filing Date Granted

Executed Declaration and Power of Attorney documents

Marked-up Filing Receipt

WELSH & KATZ, LTD.

120 South Riverside Plaza, 22nd Floor

Chicago, Illinois 60606

Phone (312) 655-1500

Fax No. (312) 655-1501

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CERTIFICATE OF MAILING

I hereby certify that this Communication, in duplicate, with its surcharge fee, the Notice to File Missing Parts, executed Declaration and Power of Attorney, a Petition, its enclosed Exhibits I-V, the Petition Fee, and Marked-up Filing Receipt, are being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Attention: Box Missing Parts, Application Branch, Assistant Commissioner for Patents Washington, D.C. 20231, on April 12, 2002.

  
Edward P. Gamson